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October 3, 2000

Rick Lanham, Project Manager  
Illinois Environmental Protection Agency  
Bureau of Land, Federal Site Remediation Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62702



Re: Eagle Zinc, Hillsboro, Illinois

Dear Mr. Lanham:

On behalf of our client, T.L. Diamond & Company, Inc. ("T.L. Diamond"), I am writing to respond to questions 1 through 3 (required for each response), 12 through 15 and 17 through 19 ("Second Round Response") contained in the Illinois Environmental Protection Agency's ("IEPA") Information Request, dated June 28, 2000 ("Second Round Response"). T.L. Diamond had previously responded to the other questions contained in the Information Request by letter dated August 22, 2000 ("First Round Response"). IEPA's requests have been retyped with T.L. Diamond's response following.

**1. Identify the person(s) answering these questions on behalf of Respondent.**

Thomas A. Youngless, Manager  
Eagle Zinc  
218 Industrial Park Drive  
P.O. Box 340  
Hillsboro, IL 62049  
(217) 532-3971

Paul Dean Bangor, Manager  
T.L. Diamond & Company, Inc.  
P.O. Box 184  
Main Street  
Spelter, WV 26438  
(304) 623-2916

**RELEASABLE**

10/11/2000

**REVIEWER MD**

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Lois Kimbol, Esq.  
Joseph Freudenberg, Esq.  
Dechert  
4000 Bell Atlantic Tower  
1717 Arch Street  
Philadelphia, PA 19103  
(215) 994-4000

**2. For each and every question contained herein, identify all persons consulted in the preparation of the answer.**

Except as otherwise provided below, Mr. Youngless and Mr. Bangor were consulted in the preparation of the answers related to site history, site conditions and operations at the site.

**3. For each and every question contained herein, identify all documents consulted, examined, or referred to in the preparation of the answer or that contain information responsive to the question and provide true and accurate copies of all such documents.**

This information is provided below as requested.

**4.-11.** These questions were answered in the First Round Response

**12. For the time period that Respondent owned, leased and/or operated the site, describe and identify the location of the physical characteristics of the site including but not limited to the following:**

**A. Surface structures (e.g., buildings, tanks, railroad tracks, etc.);**

See Site Plan, prepared by Hurst-Rosche Engineers, Inc., December 17, 1998, attached hereto as Exhibit 12A.

**B. Ground water wells, including drilling logs;**

Information related to on-site groundwater wells was provided in the First Round Response. See Response # 16.

**C. Berms, ponds, lagoons, wetlands, and the like;**

See Site Plan attached hereto as Exhibit 12A.

**D. Past and present storm water drainage systems, runoff systems, oil-water separators, wastewater treatment systems, and sanitary sewer systems (including septic tank(s) and subsurface disposal field(s)), including the on- or off-site discharges or destinations of these systems:**

There is a septic system associated with the office building with a line believed to be running north to south, west of the plant buildings.

IEPA issued National Pollutant Discharge Elimination System (NPDES) permit No. IL0074519 for T.L. Diamond's stormwater discharge on June 20, 2000. The stormwater is discharged through 2 discharge points, discharge number 001 to an unnamed tributary to Middle Fork Shoal Creek from an on-site pond and discharge number 002 to an unnamed tributary to Hillsboro Lake.

See the following documents attached hereto as Exhibit 12D:

Answers to Interrogatories, #18, Illinois v. T.L. Diamond & Company, No. 96-MR-70, March 17, 1998;

Letter to Dean Bangor, Eagle Zinc, from United States EPA, January 13, 1993;

Letter to Tom Youngless, Eagle Zinc, from Suzanne Epperson, IEPA, February 8, 1994;

NPDES Permit #IL0074519, June 20, 2000;

Letter to Tom Youngless, Eagle Zinc, from Susan L. Horneman, Army Corps of Engineers, June 21, 2000.

**E. Any and all additions, demolitions or changes of any kind to physical structures on, under or about the site, or to the property itself (e.g., excavation work) and state the dates on which such changes occurred. Identify and provide the quantity of any wastes or other materials generated by these activities and the disposition of these wastes or materials (e.g., location at the site if not removed from the site, transporter and receiving facility if removed from the site, etc.);**

T.L. Diamond has owned and operated the site for over 16 years. Over that period, various minor additions, demolitions and changes have occurred at the site.

The only significant alteration to the site was the demolition of an abandoned brick building with a concrete slab roof in 1991 or 1992. Some of this demolition debris was disposed at the Envotech Landfill.

See Answers to Interrogatories, #9, Illinois v. T.L. Diamond & Company, No. 96-MR-70, March 17, 1998, attached hereto as Exhibit 12D.

**F. Underground tanks, associated piping and appurtenances:**

A 500 gallon unleaded gasoline underground storage tank was removed at the site on April 20, 1998. Documents regarding the tank were provided in the First Round Response. T.L. Diamond has since completed the site classification investigation and submitted a Site Classification Completion Report to the IEPA which recommends that no further action be conducted in connection with the tank.

See Site Classification Completion Report attached hereto as Exhibit 12F.

**G. Air pollution control equipment and air pollution emission units or sources.**

See the following documents attached hereto as Exhibit 12G:

Operating Permit, Date Received: July 26, 1982;

Application for Permit Renewal/Operating Permit, June 3, 1985;

Operating Permit, Date Received: February 9, 1987;

Operating Permit, Date Received: February 8, 1989;

Operating Permit, Date Received: August 29, 1990;

Letter to Arthur Martel, T.L. Diamond, from Bharat Mathur, IEPA, September 1, 1990;

Letter to Tom Youngless, Eagle Zinc, from Miles Zamco, IEPA, April 10, 1991;

Letter to IEPA from Tom Youngless, Eagle Zinc, April 24, 1991;

Operating Permit, Date Received: April 29, 1991;

Operating Permit, Date Received: May 8, 1992;

Annual Emissions Report - 1992;

Annual Emissions Report - 1993;

Annual Emissions Report - 1994;

Annual Emissions Report -1995;

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Registration for Non-Major Source Status Based on Actual Emission Levels, March 7, 1996;

Receipt of CAAPP FESOP Application, March 7, 1996;

Letter to Tom Youngless, T.L. Diamond, from Donald Sutton, IEPA, March 11, 1996;

Letter to Tom Youngless, Eagle Zinc, from Richard Jennings, IEPA, April 10, 1996;

Letter to Richard Jennings, IEPA, from Tom Youngless, Eagle Zinc, April 25, 1996;

Letter to Eagle Zinc from Donald Sutton, IEPA, September 18, 1996;

Letter to Tom Youngless, Eagle Zinc, from Richard Jennings, IEPA, November 27, 1996;

Letter to Richard Jennings, IEPA, from Tom Youngless, Eagle Zinc, December 9, 1996;

Letter to Tom Youngless, Eagle Zinc, from Donald Sutton, IEPA, December, \_1, 1996;

Annual Emissions Report - 1996;

Operating Permit, Date Received January 27, 1997;

Letter to Tom Youngless, Eagle Zinc, from Richard Jennings, IEPA, July 18, 1997;

Letter to Richard Jennings, IEPA, from Tom Youngless, Eagle Zinc, August 1, 1997;

Malfunction Log;

Letter to Tom Youngless, Eagle Zinc, from David Kolaz, IEPA, May 11, 1998;

Letter to Sunil Suthar, IEPA, from Tom Youngless, Eagle Zinc, June 25, 1998;

Construction Permit; Date Received August 6, 1998;

Letter to Tom Youngless, Eagle Zinc, from David Kolaz, IEPA, August 27, 1998;

Letter to Dennis Brown, IEPA from Frank H. Hackmann, Sonnenschein Nath & Rosenthal, November 3, 1998;

Letter to Laurie Brinkmann, IEPA, from Tom Youngless, Eagle Zinc, March 1999.

**13. For the time period that Respondent owned, leased and/or operated the site, describe the operations that occurred at the site including but not limited to the following:**

**A. Products that were manufactured at the site;**

Zinc oxide  
Metallic zinc granules

**B. The process(es) used to manufacture the products;**

T.L. Diamond produces zinc oxide by a pyrometallurgical process involving mixing zinc-bearing feedstocks with sized anthracite coal at the mix room. The furnace mix is then fed into an 8-foot diameter by 50-foot long natural gas fired rotary furnace at the Block #2 Furnace Building. Natural gas provides a heat source and anthracite coal provides a reducing atmosphere to reduce the zinc feedstocks to zinc vapor. The zinc vapor is drawn from the rotary furnace into a refractory brick combustion chamber and combusted to zinc oxide by the addition of ambient air. The zinc oxide, suspended in the vapor stream, is drawn into a steel flue and a series of steel cooling loops to cool the vapor stream and collect the zinc oxide in a baghouse. The zinc oxide collected in the baghouse is conveyed to the refinery and stored in bins before refining. Based on the physical and chemical properties of the zinc oxide, bins of zinc oxide may be blended while being refined. The refining process involves conveying the zinc oxide through a natural gas fired rotary dryer in which the temperature of the zinc oxide is varied to achieve the product characteristics desired. The refined zinc oxide is cooled by conveying it through another rotary drum, milled and conveyed to storage bins. The zinc oxide is packaged in 50-pound paper bags or super sacks, palletized and stored for shipment. Zinc oxide, commonly referred to as "dust row," is also collected during the refining process and sold as product.

The solids left in the rotary furnace ("residuals") are discharged from the rotary furnace into the discharge chamber, quenched in water and hauled to the mix room pad for storage. The residual material is processed to separate carbon fines from other residual materials, historically through a water jig process and presently by screening. The carbon fines are either sold, or used in the Block #2 furnace or Waelz Kiln in the Block #3 building. The oversize residuals from the separation process are processed using the Waelz Kiln in the Block #3 Building. Residual in the Waelz Kiln is reduced and volatilized and then reoxidized using ambient air. The oxide is then separated using a baghouse and used as feed in the Block # 2 furnace. At times, the residual was mixed with crushed limestone. In addition, the Waelz kiln has also in the past been used to calcine crude zinc oxide prior to use in the Block #2 furnace.

During the early part of T.L. Diamond's operation of the facility, a single retort process was experimentally used to manufacture zinc oxide for a period of approximately one month. In that process, zinc bearing feeds were charged to a sweat furnace and the molten zinc metal, from that furnace was in turn charged to the retort furnace. In the retort furnace, the molten

zinc was volatilized and the zinc vapor was oxidized in a brick chamber by introducing ambient air. The zinc oxide was drawn to a baghouse collector and stored for further processing.

The metallic zinc granule process is conducted in the Zebra Building, located in the northern portion of the plant. Crude zinc granules are delivered in super sacks and bulk to the Zebra Building. The bulk zinc granules are stored on a concrete pad and the super sacks are stored inside. The crude zinc granules are conveyed to a cage mill to separate zinc oxide from the zinc granules and then screened. The granule product is a -8 +30 mesh fraction and is stored in super sacks. The oversize (metallic zinc) is collected and either sold or shipped as a feed material to a sister plant. The undersize material is zinc oxide and is sold as a product.

See Summary Statement of Paul D. Bangor, March 1998 attached hereto as Exhibit 13B.

**C. The materials used in the manufacturing and/or maintenance process(es), the source of these materials, and how these materials were managed at the site;**

Raw materials used in the zinc oxide production process include zinc bearing feedstocks, anthracite coal and natural gas. These materials are received from commercially available sources. The zinc-bearing feedstocks are received in super sacks or bulk and are delivered to the plant by railcar and truck. The zinc materials have included zinc-bearing feedstocks purchased from various zinc and zinc oxide producers, zinc purchased from DKH (Duisburger Kupferhutte or DEKA), and calcined zinc material. The zinc bearing feedstocks are off-loaded at the loading dock and taken to the mix room for storage. Occasionally, zinc-bearing feedstocks may be stored on a bermed concrete pad in the mix room. Zinc-bearing scrap feed was also received in connection with the operation of the single retort process. Coal is delivered to the plant by rail in gondolas and is unloaded and stored between the mix room and loading dock. Residuals are also used as feedstock when appropriate. These materials are hauled within the plant site using dump trucks, front-end loaders and forklifts. Natural gas is received via a pipeline.

In addition to the raw materials used to produce zinc oxide, T.L. Diamond uses a number of ancillary materials in its day to day operations. Some of these materials include gasoline, diesel fuel, anti-freeze, motor oil, hydraulic oil, parts washer solvent, and propane. All are bought from commercial sources. Gasoline and diesel fuel are stored in two 500 gallon above ground tanks east of the Maintenance Shop. Anti-freeze, motor oil, hydraulic oil, and parts washer solvent are stored and used primarily in the Auto Shop. Propane is stored in two 30,000 gallon above ground tanks north of the Office Building and in canisters east of the loading dock. T.L. Diamond also purchases some steel and brick for use in maintenance activities.

**D. Wastes, by-products, residues or other materials generated by the manufacturing and/or maintenance process(es);**

The only hazardous waste typically generated by T.L. Diamond is used parts washer solvent and it is picked up bi-monthly by Safety Kleen for recycling. Safety-Kleen also collects the site's used fluorescent light bulbs.

Non-hazardous wastes generated by the facility include:

- Waste oil
- Scrap metal
- Lead acid batteries
- Used tires
- Used pallets
- Construction debris
- Production refuse
- Normal refuse (office and lunchroom trash)

The waste oil, scrap metal and used pallets are recycled off-site. Some pallets are disposed in an off-site landfill. In addition, some waste oil is used to lubricate chains and open gears at the site. Used tires and used lead batteries are traded in when new tires and batteries are purchased. Construction debris and normal refuse are placed in dumpsters and disposed at Envotech Illinois, LLC (Litchfield - Hillsboro Landfill). Production debris (refuse that has come in contact with zinc oxide, used refractory brick and used baghouse bags) is placed in a roll-off container and disposed of at Envotech Illinois, LLC (Litchfield - Hillsboro Landfill) as a special waste by a licensed waste hauler.

Materials such as coarse zinc oxide that settled in the combustion chamber, trail, and cooling loop hoppers are returned to the manufacturing process along with floor sweepings and other zinc bearing materials that are cleaned up. As discussed above, stockpiled residuals on site are reused in the manufacturing process.

See the following documents regarding waste materials, by-products, residuals, and other materials attached hereto as Exhibit 13D:

On-Site Industrial Waste Handling Report Form, December 14, 1988;

Letter to Planning and Reporting Section, IEPA, from Tom Youngless, Eagle Zinc, March 11, 1991;

Letter to Tom Youngless, Eagle Zinc, from W. Bud Bridgewater, IEPA, November 2, 1993;

Letter to Tom Youngless, Eagle Zinc, from David Jansen, IEPA, December 27, 1993;

Letter to Tom Youngless, Eagle Zinc, from David Jansen, IEPA, December 28, 1993;

Letter to David Jansen, IEPA, from Tom Youngless, Eagle Zinc, February 21, 1994;

Letter to Tom Youngless, Eagle Zinc, from David Jansen, IEPA, March 16, 1994;



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Letter to David Jansen, IEPA, from Tom Youngless, Eagle Zinc, May 9, 1994;

Letter to Tom Youngless, Eagle Zinc, from Brian White, IEPA, June 7, 1994;

Letter to Tom Youngless, Eagle Zinc, from Joseph Svoboda, IEPA, May 4, 1995;

Letter to Tom Youngless, Eagle Zinc, from Ali Hyderi, Office of the Attorney General, July 24, 1995;

Letter to Planning and Reporting Section IEPA, from Tom Youngless, Eagle Zinc, October 4, 1996;

Memorandum to Division of Land Pollution Control, Division File from Richard Johnson, Dated June 1, 1999;

Letter to Tom Youngless, Eagle Zinc, from David Jansen, IEPA, June 9, 1999;

Various manifests, bills of lading, etc.

**E. Wastes accepted from off-site sources for disposal on-site;**

No wastes are accepted from off-site sources for disposal on site.

**F. Laboratory chemicals used to analyze products or wastes, the wastes generated from laboratory procedures, and how these wastes and chemicals were managed on-site;**

Zinc products are tested on-site in T.L. Diamond's quality control laboratories. In addition to product, a list of chemicals used in the laboratory is attached hereto as Exhibit 13F. Any waste liquid from the office laboratory is discharged to T.L. Diamond's sanitary wastewater discharge. Zinc oxide-containing water from the plant laboratory is returned to the manufacturing process.

**G. Methods or processes used on-site to treat, store, accumulate, recycle, reuse, or dispose of wastes generated on- or off-site, including but not limited to open dumping, open burning, incineration, landfilling, air emissions, reclamation, waste piles, underground injection, land application, use of containers or tanks, use as fuel, etc.**

As identified above, residuals generated by the manufacturing process are reused in the manufacturing processing where feasible or otherwise sold for off-site reuse. See the answer for Question 13D relating to the management and disposal of wastes generated at the site.

T.L. Diamond does not dispose of wastes on-site by any method, including, without limitation, through open dumping, open burning, incineration, landfilling, reclamation, waste piles, underground injection, land application, use of containers or tanks or as fuel. Air emissions at the facility are subject to an IEPA-issued operating permit.

**14. For the time period that Respondent owned, leased and/or operated the site, concerning the products, wastes, by-products, residues or other materials generated by Respondent's manufacturing and/or maintenance process(es), or wastes generated by off-site sources, describe and/or provide the items as follows:**

**A. On-site management of the products, wastes, by-products, residues or other materials from the point of generation, including 1) whether any sorting of the material occurred, 2) how the material was transported from the generation point to the disposal, treatment, reclamation, accumulation or storage areas, 3) the location of the disposal, treatment, reclamation, accumulation or storage areas, 4) the commencement date and usage period for the disposal, treatment, reclamation, accumulation or storage areas, and 5) the dimensional and volumetric size of the disposal, treatment, reclamation, accumulation or storage areas;**

Zinc oxide product is contained in super sacks stored in a warehouse prior to being shipped off-site. Refractory brick is accumulated on a concrete pad until a sufficient quantity obtained to ship off-site for disposal. The management of products, residues and other materials used in the manufacturing process have been described above in response to questions 12 and 13. In addition, information provided in the First Round Response provided information and documents regarding materials present on-site.

**B. Whether any products, wastes, by-products, residues or other materials generated by the Respondent's manufacturing and/or maintenance process(es) were co-mingled, consolidated or otherwise mixed with waste, by-products, residues or other materials left by a previous site owner and/or operator, including but not limited to 1) a description of and the quantity of the Respondent's material and the previous material, 2) the identity of the generator of the previous material and the basis for this knowledge, and 3) the location(s) at the site where the co-mingled, consolidated or otherwise mixed material exists;**

It is T.L. Diamond's goal not to commingle its materials with those of its predecessors and it has generally not mixed, consolidated or commingled residuals generated by T.L. Diamond with residuals generated by either Sherwin-Williams or Eagle-Picher with the following exceptions. Some residuals of the previous site owners have been screened with T.L. Diamond's residuals for sale of the carbon fines. Oversize from the commingled materials is either used in the Waelz kiln or is subject to T.L. Diamond's beneficial reuse request which is pending with the IEPA. Some rotary residue cleanout is stored with cleanout from the predecessor owners' operations on the southern part of the plant site. Also some oversize and carbon plant hutch from T.L. Diamond's operation of the recovery

jig has been commingled with similar materials from the predecessor owners' operations in the southcentral portion of the plant.

**C. Any sampling and/or analyses performed on any of the products, wastes, by-products, residues or other materials at the site generated by the Respondent's manufacturing and/or maintenance process(es), including but not limited to 1) the date the sampling and/or analyses were performed, 2) the locations where the samples were taken, 3) the person(s) performing the sampling and/or analyses, and 4) the results of the sampling and/or analyses;**

T.L. Diamond performs quality control testing on its product on a regular basis using its in-house laboratory. The testing is generally performed daily when the facility is operating. Testing is performed for zinc, copper, cadmium, lead, iron, water soluble salts, insol. sodium, chlorine, color, apparent density, and oil absorption.

Other sampling information was provided in the First Round Response.

**D. The removal from the site of any of the products, wastes, by-products, residues or other materials generated by the Respondent's manufacturing and/or maintenance process(es), including but not limited to 1) when and how these materials were removed, 2) the quantity removed, 3) the names and addresses of the facilities where the materials were transported to, 4) the identity of the transporter(s), and 5) the disposition of the materials at the receiving facilities (e.g. use in a manufacturing process, disposal, etc.);**

As described in other responses to this Information Request, T.L. Diamond regularly "removes" its products by selling them to its customers. The off-site disposal of waste materials generated on-site was described above.

T.L. Diamond has made great efforts to remove and reuse residual materials present on the site. Residuals have been screened and the carbon fines sold for off-site use or reused in the manufacturing process. Oversize from the screening process has been used in the Waelz Kiln process to generate additional feedstock for the primary zinc oxide manufacturing process. In addition, T.L. Diamond has requested permission from the IEPA to reuse oversize from both furnaces as road bed and shallow fill on and off-site. Due to these reuse efforts, almost all residuals generated by T.L. Diamond have been reused (except for oversize materials for which T.L. Diamond is awaiting reuse approval). Reuse by T.L. Diamond of residuals generated by both T.L. Diamond and the previous operators of the facility has resulted, as of August 9, 2000, in approximately 16,895 tons of carbon fines being sold for off-site use, and 1,470 tons of carbon fines being used on site.

See the following documents attached hereto as Exhibit 14D:

Letter to David Jansen, IEPA, from Tom Youngless, Eagle Zinc, June 19, 1995;

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Letter to Tom Youngless, Eagle Zinc Company from David Jansen, IEPA, July 17, 1995;

Letter to David Jansen, IEPA from Tom Youngless, Eagle Zinc, August 25, 1995;

Letter to Tom Youngless, Eagle Zinc from David Jansen, IEPA, August 29, 1995;

Logs, invoices, bills of lading regarding off-site shipments.

**E. The removal of asbestos or asbestos containing materials from the Respondent's structures, buildings or piping, including but not limited to 1) when and how these materials were removed, 2) the quantity removed, 3) the location of any on-site disposal, 4) the names and addresses of the facilities where the materials were transported to, 5) the identity of the transporter(s), and 6) the disposition of the materials at the receiving facilities;**

No asbestos abatement projects have been undertaken at the site.

**F. The person(s) responsible for Respondent's waste management activities at the site.**

Mr. Youngless is responsible for waste management activities at the site.

**15. For each and every prior owner, operator, lessor or lessee of any portion of the site known to you:**

**A. Identify such persons and the nature of their operation at this site;**

It is T.L. Diamond's understanding that Lanyan Zinc Company primarily manufactured slab zinc and sulfuric acid.

It is T.L. Diamond's understanding that Eagle-Picher primarily manufactured slab zinc, zinc oxide, leaded zinc oxide and sulfuric acid at the facility.

It is T.L. Diamond's understanding that Sherwin-Williams primarily manufactured zinc oxide at the site.

In addition to information obtained from Mr. Youngless and Mr. Bangor, Mr. Morris Dodd has provided information with regard to the history of the site.

**B. Describe the portion of the site owned, operated or leased by each such person and state the dates during which each portion was so owned, operated or leased;**

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Lanyan Zinc Company owned and operated the site from 1912 through 1917. It is T.L. Diamond's understanding that the Lanyan Zinc facility was approximately 30 acres.

Eagle-Picher operated the site from about 1917 until 1980. It is T.L. Diamond's understanding that Eagle-Picher enlarged the property to its current size of approximately 133 acres.

Sherwin-Williams owned and operated the entire site from 1980 until 1984.

**C. Provide copies of all documents evidencing or relating to such ownership, operation or lease, including but not limited to purchase and sale agreements, deeds, leases, environmental indemnifications, etc.;**

See the following documents attached hereto as 15C:

Letter to Bharat Mathur, IEPA from Robert Bockstahler, Eagle Picher, July 31, 1980;

Letter to Robert Bockstahler, Eagle Picher, from, Bharat Mathur, September 4, 1980;

Letter to Robert Bockstahler, Eagle Picher from Bharat Mathur, September 24, 1980;

Application for a permit to operate, Eagle Picher, October 2, 1980;

Letter to Lester Roemelin, Eagle Picher, from Bharat Mathur, October 20, 1980;

Application for renewal of operating permit, Sherwin Williams, July 22, 1982;

Operating Permit, Received: July 26, 1982;

Prospectus of Sherwin-Williams Zinc Oxide Business;

Undated Diagram of Sherwin-Williams operations.

**D. Provide all evidence that hazardous materials were released or threatened to be released at the site during the period that the person owned the site, including but not limited to when you acquired this information and your basis for this knowledge;**

See the following documents, attached hereto as Exhibit 15D:

Letter to Peter Meehan, Sherwin-Williams from E. Edgerley, Environment & Energy Consultants, December 18, 1980;

1981-1982 Sampling Results;

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Letter to Dave Lewis, Sherwin-Williams, from John Forneris, IEPA, June 8, 1982;

Handwritten Memo, June 16, 1982;

Letter to Robert Norton, Sherwin-Williams, from E. Edgerley, Environment & Energy Consultants, September 9, 1982;

Letter to E. Edgerley, Environment & Energy Consultants, Inc., November 2, 1982;

Letter to John Forneris, IEPA, from E. Edgerley, Environment & Energy Consultants, November 23, 1982;

Handwritten notes, January 11, 1983;

Letter to E. Edgerley, Environment & Energy Consultants from Lester Roemelin, Sherwin Williams, January 18, 1983;

Letter to Frank Butler, Sherwin-Williams, from E. Edgerley, Environment & Energy Consultants, March 3, 1983;

Letter to John Forneris, IEPA, from A. K. Nanda, Sherwin-Williams, March 28, 1983;

Handwritten notes, May 4, 1983;

Letter to John Forneris, IEPA, from Lester Roemelin, Sherwin-Williams, June 3, 1983;

Letter to John Forneris, IEPA, from Lester Roemelin, September 13, 1983;

Letter to Lester Roemelin, Sherwin-Williams from E. Edgerley, Environment Energy Consultants, September 30, 1983;

Sherwin-Williams Intra-Company Correspondence to Ken Haber from Lester Roemelin, November 7, 1983;

Sherwin Williams Intra-Company Correspondence to Ken Haber from Lester Roemelin, January 12, 1984;

Letter to Ken Habor, Sherwin-Williams Company, from E. Edgerley, Sitex Corporation, March 23, 1984;

Estimate to repair breach in dam of west pond, undated.

**E. Any sampling and/or analyses performed on any of the products, wastes, by-products, residues or other materials at the site generated by such person's manufacturing and/or maintenance process(es), including but not limited to 1) the**

date the sampling and/or analyses were performed, 2) the locations where the samples were taken, 3) the person(s) performing the sampling and/or analyses, and 4) the results of the sampling and/or analyses;

Documents related to sampling were provided with the First Round Response.

**F. If you removed from the site any of the products, wastes, by-products, residues or other materials at the site generated by such person's manufacturing and/or maintenance process(es), identify 1) the materials removed, 2) when and how these materials were removed, 3) the quantity removed, 4) the names and addresses of the facilities where the materials were transported to, 5) the identity of the transporter(s), and 6) the disposition of the materials at the receiving facilities (e.g. use in a manufacturing process, disposal, etc.).**

See the response to request 14D. T.L. Diamond has also sold approximately 2,500 tons of muffle dross/zinc skims from predecessors' operations for off-site recovery. T.L. Diamond also arranged for the off-site disposal of approximately 3,800 pounds of barium-containing materials left by a previous operator of the site.

**16. This question was answered in the First Round Response.**

**17. Describe all leaks, spills or releases or threats of releases of any kind into the environment of any hazardous materials that have occurred or may occur at or from the site, including but not limited to:**

During removal of a 500 gallon underground storage tank on April 20, 1998, a release of gasoline associated with the tank was discovered. Documents regarding the removal of this tank have been previously provided during the First Round Response and a copy of the Site Classification Report is attached hereto as Exhibit 12F. Answers to IEPA's specific questions with regard to the release of gasoline follow.

**A. When such releases occurred or may occur;**

Unknown.

**B. How the releases occurred or may occur;**

A pin-size hole was observed on the tank during removal.

**C. What hazardous materials were released or may be released;**

Gasoline.

**D. What amount of each such hazardous material was so released;**

Unknown.

**E. Where such releases occurred or may occur;**

See maps in the Site Classification Completion Report.

**F. Any and all activities undertaken in response to each such release or threatened release;**

T.L. Diamond has performed a site investigation and submitted a Site Classification Completion Report to the IEPA requesting no further action from the agency.

**G. Any and all investigations of the circumstances, nature, extent or location of each such release or threatened release, including the results of any soil, water (ground and surface) or air testing that was undertaken;**

As described above, T.L. Diamond implemented a Site Classification investigation and submitted a Site Classification Completion Report to the IEPA.

**H. Any notifications of such releases to federal, state or local authorities;**

The IEPA has been notified of this release as required by the Illinois Leaking Underground Storage Tank program.

**I. All persons with information relating to subparts A through H of this question.**

In addition to the people generally identified in question 22, below, Mark Millward of Philip Environmental Services Corporation implemented the Site Classification investigation for T.L. Diamond. Mr. Millward's address and phone number are:

Mark Millward  
Philip Environmental Services  
210 West Sand Bank Road  
Columbia, Illinois 62236  
(618) 281-7173

Form R's are attached hereto as Exhibit 17.

Metals may be present in stormwater that discharges from the site. As describe above, T.L. Diamond has obtained a stormwater discharge permit and is in the process of developing and implementing a stormwater pollution prevention plan.



Historically, air emissions of zinc oxide have occurred during start-up of the Block # 2 furnace and malfunctions of the cooling loops. T.L. Diamond has installed air pollution control equipment to address the start-up issue and regularly monitors and maintains the cooling loops to ensure that they function properly. See the documents attached hereto at Exhibit 12G.

**18. If any release or threatened release identified in response to question 17 above occurred into any subsurface disposal system or floor drain inside or under any buildings located on the site, further identify:**

Not applicable.

- A. Where precisely the disposal system or floor drains are and/or were located;**
- B. When the disposal system or floor drains were installed;**
- C. Whether the disposal system or floor drains were connected to pipes and, if so, the purpose of such pipes;**
- D. Where such pipes are and/or were located;**
- E. When such pipes were installed;**
- F. How and when such pipes were replaced, repaired, or otherwise changed.**

**19. Identify all persons, including you, who may have manufactured, given, sold, transferred, delivered, or otherwise handled hazardous materials at the site. In addition:**

- A. Describe in complete detail all arrangements pursuant to which such persons may have so handled such items or materials;**

To the extent that zinc-containing materials and products are considered hazardous materials, T.L. Diamond has managed hazardous materials on the property since the acquisition of the site. The materials have been managed as described above. In addition, suppliers of the raw materials used in the production process deliver hazardous materials to the site.

Eagle-Picher and Sherwin-Williams would also have managed hazardous materials at the site.

**B. State the dates on which such persons may have handled each such item or material;**

T.L. Diamond has handled zinc-containing materials at the site since its acquisition in 1984. Eagle-Picher and Sherwin-Williams handled hazardous materials during their periods of ownership.

**C. State the amounts of such items or materials that may have been so handled on each such date;**

As discussed above, if zinc-containing materials are considered hazardous materials, they have been handled everyday since the facility was constructed. It is impossible to quantify how much material was handled on each date.

**D. Identify the persons to whom such items or materials may have been given, sold, transferred, or delivered;**

Product is sold to T.L. Diamond's customers. Waste materials have been transported to the various facilities identified in the documents provided to the IEPA.

**E. Describe the nature, including the chemical content, characteristics, physical state (e.g., solid, liquid) and quantity (e.g., volume, weight), of all hazardous wastes, materials, and substances and describe all tests, analyses, and results of such tests and analyses concerning such items or materials;**

A material safety data sheet for zinc oxide is attached hereto as Exhibit 19E. T.L. Diamond has provided the IEPA numerous documents related to sampling conducted at the site.

**F. State whether any of the materials identified in question 19(E) exhibit any of the characteristics of a hazardous waste identified in 40 CFR 261 Subpart C;**

None of the materials used in T.L. Diamond's production process are characteristic hazardous wastes as described in 40 CFR 261 Subpart C. T.L. Diamond uses Safety-Kleen to recycle parts washer fluids.

**G. State whether any of the materials identified in question 19(E) are listed in 40 CFR Section 261 Subpart D;**

None of the materials used in Eagle Zinc's production process are listed hazardous wastes as described in 40 CFR 261 Subpart D.

**H. State whether any of the materials identified in question 19(E) are subject to RCRA regulation;**

As identified above, T.L. Diamond uses Safety-Kleen to recycle parts washer fluids.

**I. Describe the nature of the operations that were the source of the materials identified in question 19(E);**

As identified above, T.L. Diamond generates a small quantity of hazardous waste from two parts washers.

**J. Provide copies of all documents (including but not limited to invoices, receipts, manifests, shipping papers, customer lists and contracts) which may reflect, show or evidence the giving, sale, transfer, or delivery, or other arrangements under which the giving, sale, transfer, or delivery, of any materials to the site took place;**

See response to question 13D.

**K. Describe how these materials were managed while at the site (types of containers used, storage locations, etc.).**

The parts washer liquids are kept in the equipment until removal by Safety-Kleen.

**20. Describe the acts or omissions of any persons, other than your employees, agents or those persons with whom you had a contractual relationship, that may have caused the release or threat of release of hazardous substances at the site.**

Eagle-Picher operated the site from approximately 1917 through 1980. Sherwin-Williams operated at the site from 1980 until March 14, 1984. The operations of these predecessors are the source of much of the residual materials present on the property today. The levels of environmental controls, if any, on the predecessors' activities are unknown. It is unknown whether there have been any releases of hazardous substances at the site due to the prior operations.

**21. Describe all precautions that you took against foreseeable acts or omissions of any such third parties (e.g., prior owners, etc.) and the consequences that could foreseeably result from such acts or omissions.**

T.L. Diamond could not take any precautions against the acts or omissions of Eagle-Picher or Sherwin Williams since they occurred prior to T.L. Diamond's ownership of the site.

T.L. Diamond has excavated and reused in its production process residuals from its activities and its predecessors where such reuse is economically and legally acceptable. A request for beneficial reuse for certain "overhead" material has been submitted to the IEPA so additional materials can be reused. T.L. Diamond has also conducted a significant amount of investigations at the site, including investigations pursuant to an interim consent agreement with the State of Illinois, the results of which have been previously provided to the IEPA.

Rick Lanham, Project Manager  
Illinois Environmental Protection Agency  
October 3, 2000  
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T.L. Diamond was issued a Stormwater Discharge Permit and is in the process of developing a stormwater pollution prevention plan in connection with that permit.


\* \* \*

For each and every question above, any information provided in connection with one question is provided for all other questions and all information provided in connection with the First Round Response is incorporated herein by reference.

T.L. Diamond believes that it has fully responded to the above information requests. T.L. Diamond did not provide privileged information or documents, including, without limitation, information or documents subject to the attorney-client privilege. The request made by the IEPA included voluminous amounts of information and documents at great burden to the Respondent. Much of this information is already in the possession of the IEPA. Nonetheless, T.L. Diamond has made a diligent effort to respond to all questions.

If you have any questions concerning this response, please contact me.

Sincerely,



Lois Kimbol

LK:emk  
Enclosures

cc: Clarence L. Smith, IEPA (w/out enclosures)  
James G. Richardson, Esq., IEPA (w/out enclosures)